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Ms. Martin:

This letter is in response to the July 6, 2018 publication in the Federal Register (83 FR 31535) requesting public comments on the Draft Environmental Impact statement (DEIS) for the Medicine Bow Landscape Landscape Vegetation Analysis (LaVA) Project. The Intermountain Forest Association and its members appreciate the opportunity to comment on the proposed project.

Purpose and Need

We generally agree with the purpose and need of the LaVA project. Heavy concentrations of woody fuels are accumulating across the Forest as a result of the recent mountain pine beetle (MPB) epidemic. Those fuels pose threats to local communities, the natural ecology of the forest, and critical waterways. Reducing forest fuels and impacts from wildfires align well with the HFRA.

Other goals of the project include: aligning with desired Forest structural stages (SS), increasing public safety, moving toward desired conditions within Management Areas (MA), and improving the resiliency of green forest stands to future disturbances. We agree that widespread insect mortality has altered SS, moving away from desired conditions, and put the public in harms way. We also agree that more forest management must be completed to increase resiliency to future insect epidemics and wildfires. We encourage the Forest to discuss recent successes from previous fuels treatment projects that protected homes, slowed wildfire progression, and created safe areas for firefighters. One recent example[1] exists from

1. https://stateforesters.org/news-events/blog/state-coordination-feds-saves-hundreds-wyoming-homes-wildfire#sthash.SOFOiVp6.qMLytI9H.dpbs

the Badger Creek Fire on the Medicine Bow NF where fuel breaks are credited with saving hundreds of homes and providing protection for firefighters. These same fuel breaks were described[2] on inciweb.com with: "But then incident personnel saw a significant change. The fire reached the next fuels treatment area near the community of Wold Tract, and combined with effects of the retardant that had been applied, fire behavior quickly moderated. "You could see it; you could even feel it," the Incident Commander described."

No Action Alternative

Numerous pieces of information and analysis are missing from effects reported with the no-action alternative. Some examples follow, but do not account for all short-comings in describing effects from the no-action alternative.

The DEIS incorrectly finds no effects on public water supplies from the no-action alternative. On pg. 187, the DEIS states the no-action alternative would have "no potential for increased sedimentation, turbidity… or other changes to water quality that would affect public water supplies". This finding fails to account for expected effects from wildfires burning through hazardous fuels accumulations. Page 94 of the DEIS references Samman 2000 in stating wildfires usually follow mountain pine beetle outbreaks within 15 years. Recent wildfires on the Medicine Bow exemplify the fact that it isn't if a fire starts, it is when. When wildfires burn through dense forests or heavy fuels, the effects can be devastating to local water resources costing millions of dollars to water utilities. As an example of potential effects from a wildfire on public drinking water, the Denver Water website[3] states:

> *"The 1996 Buffalo Creek Fire burned 11,900 acres. In 2002, the Hayman Fire charred another 138,000 acres of land. The combination of these two fires, followed by significant rainstorms, resulted in more than 1 million cubic yards of sediment accumulating in Strontia Springs Reservoir. Prior to the wildfires, the reservoir had approximately 250,000 cubic yards of sediment, which had been accumulating since 1983 when the dam was completed. Increased sediment creates operational challenges, causes water quality issues and clogs treatment plants. Following the Buffalo Creek and Hayman fires, Denver Water spent more than $27 million on water quality treatment, sediment and debris removal, reclamation techniques, and infrastructure projects."*

Expected impacts to fish and amphibian species under the no-action alternative follow a similar logic to wildfires and public drinking water. In other areas of the DEIS (ex: pg 144), increased runoff and earlier snow-melt are expected effects from the no-action alternative resulting from reductions in canopy cover from insect mortality. Sever wildfires would

2. https://inciweb.nwcg.gov/photos/WYMBF/2018-06-10-2026-Badger-Fire/related_files/pict20180518-160709-0.pdf
3. https://www.denverwater.org/your-water/water-supply-and-planning/watershed-protection-and-management

increase erosion, sedimentation, and water turbidity, negatively impacting many aquatic species.

Further, the DEIS describes impacts to rare plants from trees falling on them from implementing the modified proposed action (p. 145). However, these impacts are missing from any discussion under the no-action alternative – despite the expected high rates of tree fall from insect mortality and wildfires.

We recommend performing a more thorough examination of effects from the no-action alternative and more completely describing the suite of expected impacts.

Roadless

We commend the Medicine Bow NF for analyzing roadless areas for potential treatment. We recognize the DEIS does not explicitly state treatments *will* take place in Roadless areas, but retaining treatment options in these areas presents opportunities for meeting the objectives under the purpose and need of the LaVA project. We agree with the DEIS that management activities in Roadless areas would contribute to the objectives under 294.13b in the 2001 Roadless Rule. We also recognize the 2001 Roadless Rule provided guidance that individual Forests determine what size of material constitutes "small diameter". We encourage the Medicine Bow NF to take a hard look at what definition would best create opportunities to achieve the objectives and desired conditions in the LaVA project.

Proposed Treatments

The LaVA project proposes 95,000 acres of stand initiation, 165,000 acres of intermediate treatments, and 100,000 acres of other treatments including prescribed fire. Although we applaud the Forest for taking a landscape approach to treatments we question why treatments are limited by percent of current mortality. The DEIS describes the LaVA project as a 15-20 year project. However, dead trees are rapidly degrading and operators/purchasers in timber sales are already facing difficulties with utilization in stands of dead trees. By limiting stand initiation treatments to only areas with 50-100 percent mortality, this treatment will have limited applicability in outyears and will likely reduce the ability of the Forest to meet the objectives outlined in the purpose and need. In 15-20 years, stands that are currently below 50 percent mortality may have ecological needs that better align with a stand initiation treatment. Conversely, stands that currently have more than 50 percent mortality may be better suited for intermediate treatments in 15-20 years as stand development progresses.

We recommend removing references to current stand mortality rates in the descriptions of treatment types, to better meet the objectives in the purpose and need. This includes, but is not limited to, pages 34, 89, and 90 that preclude stand initiation prescriptions as part of green tree treatments.

"Other" treatments on 100,000 acres, according to the DEIS, may include application of prescribed fire. Although prescribed fire is an important tool to manage forests, it must be applied only after the same rigor of environmental review and description of actions as mechanical treatments. Instead, the DEIS generally describes mortality from prescribed fire with: "Low to moderate levels of tree mortality from prescribed burning would be anticipated. Conditions would be created in which remaining trees would experience an increase in growth from additional sources of light, water, and nutrients. Some areas of high tree mortality may occur. Small areas of high mortality could result in patches of even-aged regeneration, creating an uneven-aged stand. Large areas of tree mortality would return the stand to the stand-initiation stage." This excerpt serves as an example of issues found with prescribed fire analysis within the DEIS. There are no descriptions of "low", "moderate", or "high" levels of mortality. Also missing is any description of total acres or percentage of each level of mortality that would be prescribed as part of implementing the LaVA project. Importantly, there are no references to support the statements of increased growth or that areas of currently high levels of mortality would regenerate with the application of stand replacing fire. In other forest types, numerous studies have found reduced growth as a result of prescribed fire (Landsberg et al. 1984, Grier 1989, Sutherland et al. 1991, Landsberg 1992, Busse et al. 2000). Rhoades (2018) found that, in lodgepole pine stands with insect caused mortality, "Wildfire consumed all conifer seedlings in uncut and cut stands and did not stimulate new conifer regeneration within four years of the fire. … This case study documents scarce conifer regeneration but ample aspen regeneration after a wildfire that occurred in the later stage of a severe beetle outbreak."

Prescribed fire activities that produce tree mortality also contribute to future fuels accumulations as those dead trees fall to the forest floor, much in the same process as insect mortality trees. It is unclear how any overstory mortality from prescribed fire moves the Forest toward meeting the objectives in the purpose and need of reducing hazardous fuels. Although prescribed fire, under the right conditions, can consume fuels on the forest floor there is no reference to any coarse woody debris fuels consumption targets or objectives though the use of prescribed fire in the LaVA project.

We recommend further analysis and discussion of effects from prescribed fire, specific acres or percentages of mortality levels from prescribed fire, and development of specific fuels reduction targets and other objectives to achieve through the implementation of prescribed fire activities.

Watershed Conservation Practices Handbook

Page 62 of the DEIS references the Watershed Conservation Practices Handbook (WCPH) (Forest Service Handbook 2509.25 Revised 2006) and states the WCPH "w[ill] be followed". However, as revised in 2006, the WCPH contains specific language that allows individual Forests flexibility in how and what portions of the WCPH they apply to projects. The 2006 amendment removed all references to the handbook containing "standards" and renamed them "management measures" and "removed verbiage that the design criteria carry the same weight and must be followed to the same degree as Forest Plan guidelines". Further, the 2006

amendment adds direction that "alternative management measures can be used" as a means of attaining the "environmental goals".

We recommend two changes:

1. Revise the first paragraph under "Project Design Features" on page 159 to read: "Effective implementation of best management practices is necessary to ensure compliance with State of Wyoming water quality standards, the Wyoming nonpoint source management plan (WDEQ 2000) and the Clean Water Act. Best management practices most relevant to the possible suite of activities in the LaVA Project are provided in appendix C of the hydrology report."
2. Remove other references to the WCPH in the DEIS as a binding document and also remove descriptions of the management measures from the WCPH as measures the Forest must implement. Instead, concentrate on state of Wyoming and FS best management practices as a means toward successfully meeting the standards outlined in the Forest Plan and requirements of the CWA.

Equivalent Clearcut Acres

We see no reason to apply any restrictions on the basis of the equivalent clearcut acres (ECA) concept. We fail to find any standard in the Forest Plan that applies the 25 percent ECA restrictions. Importantly, in response to comments, the DEIS states, "the project has been designed to treat the maximum amount of acres possible in any watershed without exceeding the 25 percent equivalent clearcut area threshold established in the regional Watershed Conservation Practices Handbook (USDA Forest Service 2006)." However, we also fail to find any reference to any management measure in the WCPH that recommends a limit of 25 percent ECA for a watershed. On the chance this recommendation is derived merely from a reference discussion within the WCPH, as discussed earlier, the WCPH does not establish any binding standards and, instead, proposes "management measures". Further, the amended WCPH adds direction that alternative management measures can be used.

On the apparent lack of a Standard, Guideline, or other binding direction, we recommend removing restrictions pertaining to equivalent clearcut acres.

The Intermountain Forest Association and its members appreciate the Medicine Bow NF taking on a project across a meaningful scale that has the potential to reduce hazardous fuels and increase resiliency in the face of future insect and wildfire disturbances. We also appreciate the opportunity to comment on the LaVA project and encourage the Forest to provide themselves as much latitude as possible in project design to achieve the objectives under the purpose and need.

Thank you,

Ben Wudtke
Executive Director

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